DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021482 Address: 333 Burma Road **Date Inspected:** 03-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed: CWI Inspector: Mr. Bao Qian

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

Segments 13 and 14 East

This QA Inspector observed ZPMC welder Mr. Sun Guzuo, stencil 058100 used submerged arc welding procedure WPS-B-T-2221-B-L2C-S-2 to make segment 13AE groove weld SEG3007-007. This QA Inspector observed a welding current of approximately 650 amps and 31.0 volts. This QA Inspector confirmed that Mr. Sun Guzuo appeared to be certified to make this weld and electric heaters had been used to preheat the base material prior to welding. Items observed on this date appeared to generally comply with applicable contract documents.

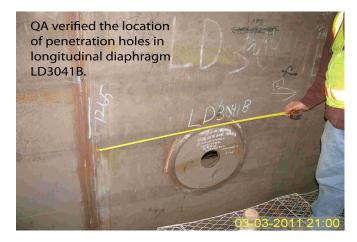
This QA Inspector observed ZPMC welder Mr. Zhu Jibo, stencil 055564 used flux cored welding procedure WPS-B-T-2232-ESAB to make OBG segment 13AE weld SEG3066-006. This QA Inspector measured a welding current of approximately 340 amps and 31.0 volts. This QA Inspector observed the maximum welding parameters listed in the welding procedure specification are 320 amps, 26.6 volt and Mr. Zhu Jibo had a welding current that

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

was approximately 20 amps and 4.4 volts above the maximum limits. This QA Inspector showed ABF CWI Mr. Bao Qian the welding meter and he had Mr. Zhu Jibo adjusted the welding machine to have a current of approximately 320 amps and 26.0 volts. Following adjustment of the welding machine, items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector performed random document review of "Team China request for information" (TC-RFI) documents #TC-RFI-035R0, #TC-RFI-035R1, #TC-RFI-035R2 and #TC-RFI-035R3. These RFI's address installation of various duct holes in the East and West lifts 13 and 14 segments. This QA Inspector performed random visual inspections of the locations referenced on the RFI's for each of the drawings. The drawings were marked up to show the status of the holes and this QA Inspector took random photographs of the holes and various copies of the photographs have been placed in "TC-RFI Documentation" folder located on Team China common Z drive.



Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer